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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/726,582

12/04/2003

Koichi Akiyama

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01/12/2005

OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/726,582

Applicant(s)

AKIYAMA, KOICHI

Examiner

Rochelle Blackman

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s)        is/are withdrawn from consideration.
- 5) ☐ Claim(s)        is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s)        are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No.       .
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>      </u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                     |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/04/03</u> | 6) <input type="checkbox"/> Other: <u>      </u>  |

## DETAILED ACTION

### *Claim Objections*

Claim 1 is objected to because of the following informalities: on pg. 16, line 7, there should be an - -a- - between "with" and "side". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-8 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kakuta et al. (U.S. Patent No. 6,364,493).

Kakuta discloses a supporting mechanism (see FIGS. 1-16) for a rod integrator (1), comprising: a holding unit/ first holding member (13) that holds a rod integrator; and a supporting member/ first supporting member (5) that presses the holding unit against the rod integrator to support the rod integrator (see location of 5 in FIG. 5 - "support member" 5 is considered to be "pressing" the "holding unit" 13 against "rod integrator" 1 because it forces contact between "holding unit" 13 and "rod integrator" 1), wherein the holding unit comprises a contact surface/ first contact portion (see 14, 15, 25, 37) which contacts with side surface/ first side surface (2, 3, 23, 24) of the rod integrator except in a vicinity of edges of the side surface and a vicinity of a light entrance plane (38) and a

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light projection plane of the rod integrator (4); wherein the holding unit includes a single holding member (see 13) which contacts (see 14, 13, 25, and 37) with two side surfaces of the rod integrator that are adjacent to one another; wherein in at least one of the side surfaces of the rod integrator, the holding unit contacts the side surface of the rod integrator except areas having predetermined widths from the edges of the side surface (see where "contact surface" 14, 15, 25, 27 contacts "side surface" 2, 3, 23, and 24); wherein the holding unit has a shape such that the holding unit does not contact with an area on the side surface of the rod integrator that has a predetermined width from at least a selected one of the light entrance plane and the light projection plane of the rod integrator (also see where "contact surface" 14, 15, 25, 27 contacts "side surface" 2, 3, 23, and 24); wherein a cross-sectional shape of the rod integrator is a quadrilateral (see shaped of 1), the holding unit comprises a pair of holding members (see 14, 25 and 15, 37) each of which supports two side surfaces (3 and 24) of the rod integrator adjacent to one another, and the supporting member presses the holding unit in the direction of a diagonal of the light entrance plane of the rod integrator (see location of "supporting member" 5 in FIG. 3); a projector (see FIG. 8 and 9) for projecting an image, comprising: a light source (26); an optical modulation unit (35) that modulates the light received from the rod integrator according to image signals and projects the light as image light which shows an image; and a projecting optical system (36) that projects the image light received from the optical modulation unit; wherein the first holding member further comprises: a second contact portion (see 14, 15, 25, 37) which contacts with a second side surface (see 2, 3, 23, 24) of the rod integrator, the second side surface

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being adjacent to the first side surface and sharing the first side edge with the first side surface (see 3 and 24); wherein the first holding member covers the first side surface except areas having predetermined widths from edges of the first side surface (see "holding member" 13 relative to "rod integrator" 1 in FIG. 6); wherein when the first side surface is divided in a direction of a light axis of the rod integrator into: an entrance part (38) which is adjacent to a light entrance plane of the rod integrator; a projection part (4) which is adjacent to a light projection plane of the rod integrator, and a middle part (see 2, 3, 23, 24) between the entrance part and the projection part, the first contact portion contacts only the middle part (see "first contact portion" 14, 15 relative to "rod integrator" 1 in FIG. 6).

### ***Allowable Subject Matter***

1. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. The following is a statement of reasons for the indication of allowable subject matter:

Claim 9 has been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the feature of the "second holding member" comprising "a third contact portion which contacts with a third side surface" and "a fourth contact portion which contacts with a fourth side surface of the

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rod integrator" in combination with the other particular combination of features recited in claims 7, 8, and 9.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RB



**JUDY NGUYEN  
SUPERVISORY PATENT EXAMINER**